YUKON GOVERNMENT IMPLEMENTATION PLAN FOR THE FINAL REPORT OF THE CABINET COMMISSION ON ENERGY

November, 1998

Yukon
Government

Government of the Yukon
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INTRODUCTION

The Cabinet Commission on Energy submitted 56 recommendations in its final report issued in September, 1998. The Commission has been successful in targeting the crucial issues in the electricity sector as well as broadening the energy debate into the area of energy management.

Within two months of the release of this report, the Yukon government has delivered a full response. Beginning in early November, the government committed $16 million to four early actions – Rate Stabilization Fund, Green Power Initiative, Energy Efficiency Initiative and Wind Energy Research and Development – answering a number of the Commission's recommendations. Now, at the end of November, the government is delivering this Implementation Plan that provides a detailed response to the Commission's final report

The Yukon government has accepted *all* 56 of the Commission's recommendations and will act on them within the suggested timelines.

The Implementation Plan was developed through the collaborative efforts of 10 government departments and will provide the basis for regular reporting to the public. For each recommendation one prime objective was identified as essential to address the recommendation. In the plan, this objective appears in italics above the list of actions. The Commission's suggested timeline appears below each recommendation. The timelines are defined as follows:

- **general**: ongoing, not time specific, broad in scope;
- **short-term**: implementation within two years;
- **medium-term**: implementation within two to four years; and
- **long-term**: implementation within four or more years.

Many of the medium- and long-term responses include early actions and a number of them identify early completion dates.

Funding for new initiatives has not been indicated in the plan. Many of the activities can be carried out using existing or planned funds. To address new energy priorities, departments are looking at a number of options including internal restructuring, alternative investment structures and partnership funding inside and outside the Yukon.

The Implementation Plan outlines what the government will do. However, the Yukon government recognizes that non-governmental agencies play a critical role throughout the Yukon's energy sector. For example:

- Yukon Utilities Board and stakeholders guide electricity regulatory processes;
- communities play the lead role in Community Energy Management (CEM); and
- individuals are key participants in energy efficiency programs and initiatives.

The five goals that have guided the work of the Commission have also guided the development of this plan. These goals have been adopted by the government as the foundation principles for a comprehensive energy policy for the Yukon. These five principles are:

1. sustainable development of energy resources;
2. efficient use of energy;
3. secure supply of reliable energy;
4. affordable energy; and
5. openness and accountability in energy decision-making.

Action is fundamental to effective policy. The Implementation Plan is designed to reflect this. The Commission's final report, this Implementation Plan, together with the four early actions, provide a comprehensive policy framework to ensure action, integration and collaboration in the Yukon's energy sector, for the long term.

Recommendations	Actions

ENERGY MANAGEMENT

Energy management in our homes and businesses

1. Yukoners should move away from electric heating systems as the primary source of heating. ***General***	*Support cost-effective home heating system conversions and dual-fuel heating opportunities.* a) Investigate ways to encourage use of dual-fuel heating sources; b) Assess available dual-fuel heating technologies; c) Modify, as required, Residential and Commercial Electricity Management Programs (REMP and CEMP) to support dual-fuel heating sources; and d) Continue the Home Repair Program to finance heating system conversions and upgrades.
2. The Yukon public should have easy access to information on how to better manage energy consumption in their homes. ***Short-term***	*Foster business and consumer education and increase access to information about energy management opportunities.* a) Target gaps in consumers' knowledge and develop appropriate educational initiatives in support of existing home energy management programs; b) Create information materials on home energy use; and c) Develop a website with links to other key energy-related sites.
3. Bring back a PowerSmart™ type of program targeted at total energy use. ***Short-term***	*As part of a broader energy efficiency initiative, carry out a program and set of activities that build on the success of PowerSmart™.* a) Determine partners and program and public needs; b) Research available programs and links with existing government energy programs; c) Design and implement the program and activities in stages in conjunction with supporting educational initiatives. Begin first stage in 1999; and d) Establish a system to evaluate the success of the program uptake and reduction in energy use.

Recommendations	Actions
4. Local market development of products that enhance and support the efficient use of energy should be encouraged. ***Medium-term***	*Keep investment dollars in the Yukon by encouraging appropriate energy efficiency measures and technology development.* a) Consult with local energy businesses about market opportunities and the role of government; b) Develop a Yukon Energy Business Directory; c) In partnership with the private sector, prioritize and carry out business development and marketing initiatives; and d) Set up an "energy business innovation" site to be linked to Economic Development's website to provide information on market-ready opportunities – products, markets and businesses.
5. Develop trade and investment opportunities and cultivate export markets in circumpolar nations for Yukon expertise, products and services in the energy sector and continue to encourage technology transfer and applied energy research. ***General***	*Establish the Yukon as an important link for the trade of energy goods and services with circumpolar nations.* a) With the private sector, develop marketing packages of existing energy expertise in the Yukon (e.g. northern building materials and practices, small scale energy systems); b) Explore energy-related trade and investment opportunities; c) Develop the Yukon as an access point for southern-based energy expertise to trade with circumpolar nations. Link training opportunities and capacity building in the Yukon with this transfer of expertise; and d) Market the Yukon as a good place to carry out energy research and development; demonstrate through advancement of wind research and development.

Recommendations	Actions
Energy management in government operations	
6. Eliminate conflicts with Community Energy Management (CEM) principles, specifically in the areas of: **• community planning, and** **• resource management.** ***Medium-term***	*Integrate CEM principles into Yukon government policy in the areas of community planning and resource management.* a) Examine existing Yukon government planning and resource management policies and identify opportunities, constraints and options for CEM principles; b) Develop CEM criteria for policy development and evaluation; c) Carry out policy analysis in parallel with actions carried out in response to recommendations 12 and 13; d) Consult with stakeholders, particularly First Nations and municipal governments, on key issues, priorities and needs (in conjunction with recommendations 12, 13 and 14); and e) Develop a policy framework incorporating CEM principles in areas of resource management and community planning and link to other Yukon government policies.
7. Yukoners should be provided with information about the links between energy use, local environmental impacts, greenhouse gas emissions and climate change. ***Medium- to long-term***	*Inform Yukon people about how we can all minimize greenhouse gas emissions.* a) Build on the speaker and workshop series linking energy use with climate change that was launched in early November, 1998; b) Beginning with a set of climate change fact sheets, develop a range of information materials for the Yukon public; c) Use the Yukon Climate Change Fund and federal funds for research and public outreach in the Yukon; and d) Carry out Yukon-specific analysis of emissions and collect information about regional impacts of climate change (as part of recommendation 36).

Recommendations	Actions
8. Yukon Housing Corporation programs should target energy efficiency in the residential sector to identify opportunities for efficiency in the design and operation of buildings as well as products and services. ***Medium-term***	*Build on the success of existing programs to enhance programming in home energy management.* a) Fully implement R2000 and EnerGuide programs; b) Develop data registry for information collected from EnerGuide audits; c) Develop appropriate energy management training for industry and the public; and d) Modify existing, or develop new programs, to encourage and enable Yukon people to improve the energy efficiency of their homes.
9. Government should encourage reduced vehicle use through: **• a tele-commuting pilot project; and** **• a program that rewards employees for using alternative transportation methods, including car-pooling and greater use of public transit.** ***Short-term***	*Explore commuting options and develop pilot project(s) to reduce vehicle use and greenhouse gas emissions.* a) Telecommuting • Research issues and prepare draft criteria; • Design a pilot project for management category employees and solicit participants; • Initiate the project within one year and evaluate it for potential program development; and • Consult with the union on the pilot project and its results. b) Rewards program • Consult employees to solicit suggestions for incentives to encourage alternative transportation methods; and • Identify options and costs, and initiate the program within one year.

Recommendations	Actions
10. The *Energy Management Plan for Government Buildings* should identify and address design and operational barriers to reducing operating costs and greenhouse gas emissions. ***Medium-term***	*Increase and promote the success of the Energy Management Plan for Government Buildings.* a) Include energy efficiency measures in the design standards for government buildings and include an energy review in all new construction projects; b) Include performance contracting, where applicable, in the energy management plan for leased buildings; c) Advance the incentive plan for departments to keep a portion of their buildings' energy cost savings; and d) Promote proven government energy efficiency measures and products to the private sector.
11. Government should explore appropriate alternative fuels and/or vehicles for use within the government fleet. ***General***	*Examine the range of opportunities in alternative fuels and transportation for Yukon applications and disseminate results to the public.* a) Research emerging opportunities in alternative fuels and vehicles, and evaluate the potential for implementing a "Fleetsmart" type program; b) Participate, during the summer of 1999, in an experimental trial of a solar-electric prototype vehicle; c) Gradually introduce the most viable fuel and vehicle options into the government fleet for pilot testing, and make the results available to the public; and d) Implement an ongoing fleet fuel efficiency monitoring system and provide the results to client departments and employees.

Recommendations	Actions
Energy management in the community — CEM	
12. Communities should be provided with resources to facilitate the start up and development of Community Energy Management at the community level.	*In partnership with Yukon communities, establish a base of knowledge for Community Energy Management (CEM) processes, practices and projects.* a) Consult with key stakeholders to raise awareness of CEM and identify opportunities, constraints and options for CEM; b) Establish community links for technology and information transfer, and funding such as the Community Development Fund and the Federal Climate Change Action Fund; c) Develop proposals for communications, training and workshop requirements, technical expertise, and framework guidelines for CEM; d) With partners, develop and acquire educational materials for the public and community decision-makers and produce guidelines and CEM resource package for communities; and e) Carry out actions in conjunction with recommendations 6, 13 and 14.
Short-term	
13. With community and government partners, the Yukon government should facilitate three community-based sustainable energy projects.	*Realize community energy projects that are cost-effective, support community development priorities and reduce greenhouse gas emissions.* a) Establish a base of knowledge about successful community projects in other jurisdictions, local community initiatives, potential projects and expertise in the Yukon; b) Pursue technical training for community and Yukon government representatives; c) With community partners and expertise in the federal government, develop an implementation plan for community projects, carry out priority feasibility studies and implement projects; and d) Carry out in conjunction with recommendations 6, 12 and 14.
Short-term	

Recommendations	Actions
14. Territorial, municipal and First Nations governments should work in partnership to develop special community land use and zoning standards (for example, density, mix of use, proximity, infrastructure). ***Medium- to long-term***	*Examine opportunities to integrate CEM principles into community land use standards and guidelines.* a) Research innovative land use and zoning initiatives in other jurisdictions; b) Consult with key stakeholders (municipalities, First Nations, hamlets, Association of Yukon Communities, etc.) to determine barriers, opportunities and options for special land use and zoning standards; and c) Develop a timeline and options for implementing changes to new standards and guidelines for community planning.
15. Transportation use in government operations, by individuals and industry, should be targeted as a means to reduce operational costs and improve environmental standards. ***Medium- to long-term***	*Explore options for increasing transportation efficiency within the Yukon and reducing environmental impacts.* a) Review transportation strategies and experiences in other jurisdictions; b) Through consultation with employees, examine the pros and cons of implementing a "no-idling" policy for government vehicles; c) Investigate costs and benefits of emissions testing of government vehicles; d) Examine incentive programs to reward owners of high efficiency vehicles; and e) In consultation with stakeholders, develop targeted strategy to improve transportation efficiency in the Yukon.
16. Demonstration project(s) that illustrate design processes, building materials and construction practices should be developed to educate the Yukon public and contractors about potential energy savings to be realized through sound building practices and operation. ***Medium- to long-term***	*Provide Yukon people with increased access to home energy efficient design and building techniques.* a) In consultation with the building community and the public, design an energy efficient, cost-effective house for the Yukon and for export; and b) Pursue funding for its construction as a model home and develop appropriate promotional and educational materials.

Recommendations	Actions
17. The private sector should be encouraged to use performance contracting and related opportunities to improve efficiency of existing commercial building stock. ***Medium- to long-term***	*Expand energy efficiency opportunities into the commercial sector.* a) Inventory local expertise and training needs and opportunities; b) Develop materials to illustrate cost savings in government buildings and potential savings through performance contracting; c) Plan educational event(s) to target commercial enterprises; for example, highlighting Yukon Energy Corporation's C2000 (commercial building version of R2000) building; and d) Explore the possibility of delivering C2000 in the Yukon.
18. Governments should examine ways to develop site and building standards (site layout, building efficiency) to improve the energy efficiency of local housing stock. ***Long-term***	*Include efficiency considerations in site design and explore the costs and benefits of implementing supporting codes and standards.* a) Investigate alternative co-generation technologies and alternative designs for sustainable subdivisions; b) Investigate the benefits of using the National Energy Code as a guideline for enhancing energy efficient alternatives in Yukon building construction; and c) Develop pilot project(s) working towards a sustainable neighbourhood model appropriate for the Yukon.

Recommendations	Actions

ELECTRICITY ISSUES

Fairness, affordability, stability

19. Government should oversee the development and implementation of a comprehensive *Rate Stabilization Initiative* that will lead to long-term stability in electrical rates.

General

Work towards a comprehensive set of programs and policies to achieve long-term stability of electrical rates.

a) Analyse major factors contributing to long-term rate instability and determine policy options and solutions;

b) Through consultation with electrical utilities and other appropriate stakeholders, set priorities to address barriers to stabilizing rates for consumers;

c) In conjunction with recommendations 20 to 24, 27 to 29, 33 to 34, prepare action plans and commence implementation of priority components of the Rate Stabilization Initiative within one year; and

d) Develop and implement regular reporting to the Yukon public.

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20. Government should establish a Rate Stabilization Fund.

Short-term

Establish a self-financing fund to protect electrical consumers from rate fluctuations.

a) Provide Cabinet with program options and analysis for limiting electricity bills to 9% above January 1997 levels through March 2002;

b) Allocate resources to establish the fund;

c) Enact an Order-in-Council (OIC) to provide benefits to qualified customers for bills issued on or after December 1, 1998 and make program delivery arrangements;

d) Deliver the balance of the program once the Yukon Utilities Board-directed Diesel Contingency Fund relief is terminated; and

e) Review need for legislation.

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21. Government should reaffirm its commitment to a rate equalization policy.

Short-term

Confirm the principle of sharing the cost of electricity equally among Yukon people.

a) Review the intent of the rate equalization policy to ensure it complies with promotion of affordability and the new Rate Stabilization Initiative; and

b) Re-affirm the policy as part of this initiative.

Recommendations	Actions
22. Targeted subsidies for people on low or fixed incomes and seniors belong outside of the rate setting process and, where deemed necessary, should be provided by government directly. ***Short-term***	*Determine whether target populations require additional assistance on electrical bills.* a) Within the context of the Anti-Poverty Strategy, review existing subsidies specifically related to relieving electrical rates for low or fixed income earners and seniors; b) Consult with stakeholders to consider whether additional assistance is required and should be identified as a priority action item within the strategy; c) Consider the need for broader consultation; and d) Based on consultations, consider whether policy changes are necessary and whether resources are required to support policy.
23. Non-industrial ratepayers should be isolated from the potentially detrimental impacts of supplying electricity to industrial customers. ***Medium-term***	*Establish a range of acceptable investment options for supplying energy to industry that doesn't negatively impact ratepayers, and is supported by governments, utilities and industry.* a) Identify range of supply and investment options that will support rate stability goals, reduce barriers to industrial development and minimize environmental impacts; b) During supply planning, separate demand requirements for new industrial customers into peak and base loads, as a means to reduce demand fluctuations on the Whitehorse-Aishihik-Faro (WAF) grid; c) Examine means to provide on-site supply, particularly for peak load demand requirements of new industrial customers; and d) Establish criteria for allowable financial, social and environmental risks in energy sector development.

Recommendations	Actions
24. Utilities should ensure that Yukon ratepayers are protected from financial risk due to supplying electricity to large industrial customers. ***Short-term***	*Promote actions to ensure ratepayers do not have to assume undue financial risk as a result of supplying electricity to industry.* a) Analyse options to achieve this objective including: • the use of existing provisions in the Electric Service Regulations (ESR) to require a security deposit from industrial customers; and • electricity supply agreements that include provisions to reduce risk to ratepayers; b) Ensure appropriate investment options (recommendation 23) and provisions to reduce risk to ratepayers are applied to the assessment of new energy supply to industrial customers; and c) Deliver feasible and appropriate actions in conjunction with recommendation 23.
25. Government should develop a Yukon infrastructure investment development policy to ensure that industrial energy infrastructure issues are addressed. ***Medium-term***	*Establish a comprehensive investment and development policy to address infrastructure needs and provide positive benefits to the Yukon and Yukon people.* a) Integrate energy-related features into the Yukon Industrial Infrastructure Investment Policy (the former Yukon Industrial Support Policy (YISP)); b) In conjunction with recommendations 27 and 28, determine flexibility provisions for rate structures and investment; c) Facilitate partnerships in energy infrastructure development; d) Develop the policy and determine whether an associated program is required; and e) Ensure co-ordinated delivery of related programs under the new policy (e.g. EILRDP in recommendation 26).

Recommendations	Actions
26. Review the Energy Infrastructure Loans for Resource Development Program (EILRDP) to ensure objectives, guidelines and project conditions support energy policy changes pertaining to large industrial customers. ***Medium-term***	*Strengthen the Energy Infrastructure Loans for Resource Development Program (EILRDP) to ensure industry needs are being met.* a) Review the design and marketing of EILRDP and recommend changes to increase program uptake and effectiveness; b) Research the development of industry guidelines for energy efficient design and operations for incorporation in EILRDP objectives; and c) Include the consideration of flexibility provisions and investment options identified in recommendation 25, before implementing changes.
27. Utilities should pursue load diversification on the electrical system to help reduce the cost per kWh paid by consumers. ***Medium- to long-term***	*As part of the rate stabilization, energy efficiency and other initiatives pursue opportunities for load diversification of the electrical system.* a) Identify and prioritize government and utility buildings and operations where dual-fuel systems can be used and secondary energy opportunities pursued; b) Identify firm loads for connection to the Whitehorse-Aishihik-Faro grid; c) Solicit further suggestions from the utilities and other stakeholders and support direct action by the utilities; and d) Carry out dual-fuel pilot project in conjunction with recommendation 28 to examine equipment costs and needs. Use results of research as a public education tool.

Recommendations	Actions
28. Alternative rate structures and supporting initiatives to target non-industrial customers should be investigated by government. ***Medium-term***	*As part of rate stabilization and energy efficiency initiatives pursue opportunities for alternative rate structures for non-industrial customers.* a) Examine alternative rate structures that have been implemented under similar circumstances (e.g. Juneau, Alaska); b) Determine appropriate alternative rate structures such as interruptible, seasonal and time of use rates to contribute to the reduction of demand-supply imbalances and to support wise energy management; c) Identify technical requirements to support alternative rate structures such as automated metering and comprehensive billing systems; d) Provide public information on the costs, benefits and issues around alternative rate structures; and e) Carry out a dual-fuel pilot project in association with recommendation 27.
29. A system of incremental energy block pricing should be investigated to help promote and encourage efficient use of electricity. ***Medium-term***	*Promote the efficient use of energy through incremental energy block pricing, if determined to be feasible and effective.* a) Review applicability and feasibility of incremental electricity block pricing; and b) Determine effectiveness in reducing electrical energy usage, impacts on customers and compatibility with other initiatives.
30. Commodity-based rates should be investigated and seasonal rates pursued for large industrial customers. ***Medium-term***	*Remove barriers to the development of commodity-based and seasonal rates for individual industrial customers.* a) Investigate alternative rate designs and rate structures for industrial customers; b) Develop scenarios for both seasonal rate structures and commodity-based rate structures to be tailored to individual customers; and c) Pursue seasonal rates with individual customers through mechanisms such as electricity supply agreements.

Recommendations	Actions
31. Government and utilities should strengthen their roles as resource agencies and facilitators to encourage the incorporation of best energy practices into industry operations and design. ***Medium-term***	*Encourage best industry practices through information dissemination and support.* a) Investigate existing federal government programs to support energy efficiency in the industrial sector; b) Consult industry on measures government and utilities can take to support the above objective; c) Provide information about the Voluntary Challenge Registry (VCR) and other industry initiatives; and d) Identify Yukon expertise, best practices and available products; create a directory for industry.
32. Guidance should be provided to industry to pursue cost-effective, efficient operations, including waste heat recovery, where new fossil fuel generation is deemed appropriate to supply industrial projects. ***General***	*Where fossil fuel generation is used to supply industry, encourage a range of options to ensure its efficient use.* a) Conduct and provide general cost/benefit analysis of isolated and/or peak fossil fuel generators used for industry in the Yukon; b) Incorporate information about other initiatives such as emissions trading and waste heat recovery; and c) As part of actions identified in recommendation 31, assist industry in developing efficient on-site energy infrastructure.
33. A comprehensive review of the Rate Stabilization Fund should be held every third year. ***Medium-term***	*Ensure the Rate Stabilization Fund (RSF) is achieving its purpose.* a) Consult stakeholders about criteria for evaluating the effectiveness of the fund; and b) Develop conditions for the review of RSF.
34. Rates should gradually move towards the long-term objective of actual cost for different customer classes, as directed by the Yukon Utilities Board (YUB), without sacrificing the primary objectives of affordability and stability. ***Long-term***	*Along with the Rate Stabilization Initiative, move non-industrial customer class rates towards 90 to 110% of actual costs.* a) Promote this as a policy objective in association with the Rate Stabilization Initiative and other affordability provisions for consideration during future YUB processes; b) Analyse requirements for a practical transition phase to cost-based bills; and c) Support direct implementation by utilities.

Recommendations	Actions
Electricity supply options	
35. Governments at all levels should assume a renewed role in energy planning, with sustainability being the guiding principle in public policy governing all energy forms and sectors. ***General***	*Develop a long-term vision of sustainable development, management and use of energy in the Yukon.* a) Clarify the roles and responsibilities of energy stakeholders, utilities and Yukon government departments in the context of energy supply planning; b) Develop criteria for assessing energy supply projects, as part of recommendation 39, to achieve goal(s) of sustainable development; c) Identify issues related to non-utility generation (NUG) in the Yukon and consult with stakeholders on NUG development; and d) Create an energy supply planning strategy that achieves the goals of sustainable development and environmental protection.
36. Develop a Yukon-wide greenhouse gas reduction strategy. ***Medium- to long-term***	*Develop options to minimize costs and maximize economic opportunities to achieve the Yukon's greenhouse gas emissions reductions.* a) Determine the Yukon's baseline emissions by using the analyses and reduction strategies of other jurisdictions and national agencies, and the latest information through the National Implementation Process on Climate Change (NIPCC); b) Provide the Yukon public with research and analysis results; c) Consult with stakeholders about emissions and reduction strategy options; d) Develop policy to ensure that the analysis of greenhouse gas emissions is included in all energy supply and end-use planning processes; and e) Develop a greenhouse gas reduction strategy along with ongoing public outreach endeavours on climate change.

Recommendations	Actions
37. Establish a Green Power Initiative to encourage "green" alternatives (like wind, solar, or small hydro power) which reduce greenhouse gas and other emissions. ***Short-term***	*Increase the production and sale of small-scale renewable energy to meet the electrical energy needs of Yukon communities and industries and reduce greenhouse gas emissions.* a) Research program options such as green power or voluntary rates, initiatives in other jurisdictions and compatibility with federal programs such as the Canadian Renewable and Conservation Expenses (CRCE); b) Design program guidelines through research, consultation and stakeholder workshops; c) Establish funding and program delivery arrangements by the fall of 1999; and d) Begin review and approval of green power projects. (YUB will need to approve capital projects and any green power rates to be charged.)
38. Plan and implement at least one alternative energy pilot project with assistance from the Green Power Initiative, within a target of two to three years, preferably with Independent Power Producers participation. ***Short- to medium-term***	*Ensure that the green power initiative delivers tangible results.* a) As part of recommendation 37, identify and assess potential projects; b) Pursue funding opportunities through the Green Power Initiative (GPI) as well as outside sources; and c) Work with stakeholders to develop at least one energy demonstration project.
39. Establish a set of social, environmental, economic and technical criteria by which proposed supply options should be evaluated. ***Medium-term***	*Establish a comprehensive method to evaluate all costs and benefits of energy supply developments taking account of existing assessment and regulatory processes.* a) Examine energy supply project assessment processes from other jurisdictions; b) Write an options and Yukon-specific issues paper; c) Develop an assessment method through research and stakeholder consultations and in co-ordination with the development of the Development Assessment Process (DAP) legislation; and d) Ensure all proposals are assessed against the Regulatory Code of Practice.

Recommendations	Actions
40. Government should investigate the development of a Yukon-wide emissions trading model to provide a "financial" incentive for investment in and development of green power. ***Medium- to long-term***	*Investigate emissions trading as a mechanism to support green power and as part of the Yukon's Greenhouse Gas Reduction Strategy (recommendation 26).* a) Investigate the status of ongoing national pilot projects and examine possible Yukon stakeholder and government roles and Yukon opportunities; b) Produce a discussion document on options and supporting initiatives; and c) Develop a Yukon model based on domestic emissions trading initiatives and stakeholder consultations.
41. Locally supplied green power should be given priority when assessing electricity supply requirements for isolated (not connected to WAF grid) industrial customers. ***General***	*Encourage industry to pursue green power to supply energy needs.* a) Identify industry outreach and information programs in association with recommendations 37 and 39.
42. Encourage co-operation between utilities, industry, IPPs and public stakeholders in energy supply planning. ***General***	*Ensure a unified, integrated approach to addressing energy supply planning issues.* a) Identify information relating to energy supply planning currently in the public domain; b) Solicit suggestions from the utilities and stakeholders on practical mechanisms to facilitate multi-stakeholder information exchange and co-operation; and c) Develop a consultative approach to utilities' strategic planning.

Recommendations	Actions
43. New investment in publicly funded energy infrastructure projects should adhere to general principles of sustainability and efficient use of resources. ***General***	*Ensure that the policy developed out of recommendation 35 includes provision for appropriate investment principles.* a) Review all current documents, policies, and programs, such as the Umbrella Final Agreement, that could affect recommendations; b) Review how other jurisdictions are incorporating principles of sustainability in energy supply developments; c) Develop a set of clear principles for the development of new energy infrastructure projects; and d) Pursue energy resource development agreements with other orders of government.
44. Government should encourage utilities to adhere to broad and specific Community Energy Management (CEM) principles in all their activities. ***General***	*Support the principles of sustainability and participatory decision-making as part of the utilities' decisions.* a) Ask utilities to identify issues; and b) Encourage utilities to identify cost-effective ways to address the objective.
45. Electricity bills should provide information on each customer's historic electricity consumption to create more awareness about electricity use and encourage conservation, efficiency and economy. ***Medium-term***	*Encourage wise energy management practices through the provision of useful information on utility bills.* a) Ask utilities to assess feasibility and review current efforts in other jurisdictions; b) Encourage utilities to develop more informative bills through stakeholder consultations; and c) Encourage utilities to identify cost-effective ways to address the recommendation.

Recommendations	Actions
46. Government should continue its efforts to renegotiate with Canada the flexible term note on YEC's assets to eliminate the economic disincentive it creates against using surplus hydro electricity to displace fuel oil. ***General***	*Work towards renegotiating the flexible-term note to remove the economic disincentive that currently inhibits the development of a secondary sales program.* a) Continue discussions with the federal government to renegotiate flexible-term note; and b) Investigate alternatives to the flexible-term note.
47. Within the next 10 years, examine all communities that exclusively use diesel to generate electricity and identify opportunities to: • **displace diesel generation with renewable, green alternatives; and/or** • **implement co-generation to make optimal use of diesel's waste heat energy.** ***Long-term***	*Yukon-wide, work towards improved efficiency or displacement of diesel generated electricity.* a) Identify options for completing this work, such as a research and development study component of the Green Power Initiative; b) Pursue a partnership with the federal government and communities to develop a plan for assessing and implementing community energy projects; and c) Carry out actions in conjunction with Community Energy Management activities and the Green Power Initiative.
48. Grid extensions and inter-ties should be pursued only if such projects would keep electrical rates affordable for Yukon electricity consumers. ***Long-term***	*Include the costs and benefits of electrical transmission as a crucial element of energy investment planning.* a) Propose that utilities consider grid extensions and inter-ties as part of ongoing energy supply planning, load diversification, and infrastructure development; and b) Include this recommendation as an important criterion in energy investment planning.

Recommendations	Actions
Regulatory processes	
49. The Yukon Utilities Board should ensure that the principles of fairness, affordability and recognition for all parties with an interest in the process are fully addressed in a review of its Rules of Practice. ***Short-term***	*Encourage increased public access to the Yukon Utilities Board (YUB) regulatory process.* a) Examine means to allow an increased public understanding of the regulatory process itself, and the information supplied during the process; and b) Forward the recommendations to YUB within 6 months.
50. Government should encourage further streamlining of the regulatory process to make it as cost effective as possible, through such means as extending the periods between full General Rate Application (GRA), while ensuring effective measures for accountability and protection of the greater public interest. ***Short-term***	*Encourage the implementation of appropriate measures for making the YUB regulatory process more efficient.* a) Review the feasibility of longer periods between full General Rate Application (GRA) reviews, incentive or performance-based regulation, electronic regulatory filing, and co-ordinated, simultaneous filings by the Yukon Energy Corporation (YEC) and the Yukon Electrical Company Limited; and b) Through stakeholder consultation, prioritize a set of recommendations for YUB and utilities.
51. Before the next General Rate Application (GRA) hearing, identify some interim solutions that will improve intervenors' access to relevant information. ***Short-term***	*Address the issue of access to information in the regulatory process by holding a stakeholder workshop.* a) Determine the needs of intervenors through stakeholder consultations; and b) Clarify how the Access to Information and Protection of Privacy Act applies to YUB, Yukon Development Corporation (YDC) and YEC, by the summer of 1999.

Recommendations	Actions
52. Release to the public the results of government's review of the regulations under the *Public Utilities Act*, which will identify any inconsistencies between the regulations and the act. ***Short-term***	*Examine the regulations as a first step in reviewing the Public Utilities Act (PUA).* a) Examine the regulations alongside other recommendations that impact rate design and the rate setting process; b) Informally consult with stakeholders; and c) Identify inconsistencies between PUA and Rate Directives OIC and issues related to the PUA and release results of the review by the summer of 1999.
53. A formal review of the *Public Utilities Act* should be conducted to determine whether amendments could be made to support improvements to the regulatory processes and utility operation. ***Medium-term***	*Update the Public Utilities Act and resolve issues in the act if required.* a) Examine issues raised in recommendation 52; and b) Using the recommendations identified in recommendation 52, develop a review plan and carry out the review.

Recommendations	Actions
Accountability, ownership and corporate structure	
54. Government should clarify the accountability relationships in the electricity sector in the Yukon. ***Short-term***	*Facilitate accountability relationships in the electricity sector in the Yukon.* a) Review governance relationship and practices in other jurisdictions; b) Examine a range of options for clarifying and/or changing the governance structure that may or may not require legislative amendments; and c) Implement required changes and communicate results to the public by the summer of 1999.
55. The Yukon Development Corporation (YDC) and the Yukon Energy Corporation (YEC) should be more accountable to the Yukon public. ***Medium-term***	*Facilitate increased accountability of YDC and YEC to the Yukon public.* a) Consult with the boards of YDC and YEC on the issues and options; b) Establish a routine of regular visits to the Yukon Legislature for the chair and president of the Yukon Development Corporation and the Yukon Energy Corporation; c) Begin immediately to explore options to improve accountability identified in recommendation 54 to benefit the variety of energy stakeholders; and d) Implement appropriate options.
56. Review the structure and legislative mandate of the Yukon Development Corporation (YDC). ***Long-term***	*Re-examine the role of YDC.* a) Identify options to be reviewed by all energy stakeholders; b) Design a bi-annual review of the implementation changes determined in recommendation 54; and c) Design the review to benefit the broader legislative needs with respect to electricity issues.